

REMARKS

By the present amendment, claims 1, 4, 5, 13, 14, and 16 have been amended. Claim 26 to 30 have been added. Upon entry of the present amendment, claim 1-30 will be pending in the application.

The amendment to claim 1 is supported by the disclosure on p.141, lines 1 to 3, and p.148, lines 23 to 28. The amendment to claim 14 is supported by the disclosure on p.130, lines 19 to 20, and p.131, lines 9 to 17.

Newly-added claims 26 and 27 are supported by the disclosure on p.12, lines 10 to 14. Newly-added claims 28 and 29 are supported by the disclosure on p.131, lines 18 to 23. Newly-added claim 30 is supported by the disclosure on p.131, lines 24 to 25.

Claims 1-12, 18-20, 22-25 were rejected under 35 U.S.C. 103(a) by the combination of Ishizuka ('038), Uytterhoeven('488), Siga ('889), Toya('126), Matsumoto ('668), and Ohzeki ('570). Claims 1-13 and 15-25 were rejected under 35 U.S.C. 103(a) by Ohzeki('570), Uytterhoeven('488), Siga('889), and Toya('126)

Claim 1 in the present invention is new in construction as recognized by examiner. Although various components recited in claim 1 are known in the prior art, the effects obtained by a combination of those components have not been known and provide an unexpectedly superior material. A photothermographic material according to the present invention is coated from an aqueous coating solution comprising a polymer latex as a binder of an image forming layer, and gives an image having improved discrimination and having higher sensitivity and lower Dmin, as well as an improved print-out property at an unexpectedly larger level, by a combination of a photosensitive silver halide having

higher silver iodide content and a specified reducing agent represented by formula (R). Data shown in Tables 1 to 3 in the Examples of the present application support the above assertion. Especially outstanding results were obtained with a styrene/butadiene copolymer as set forth in claim 3 (see Table 1 in Example 1).

Uytterhoeven ('488) discloses silver iodide and a polymer latex, but does not teach a reducing agent of formula (R). Uytterhoeven('488) does not disclose nor suggest an improvement in discrimination having a higher sensitivity and lower Dmin and also an improvement at an unexpectedly large level in print-out property by a combination of a silver iodide and a reducing agent represented by formula (R).

Toya ('126) discloses silver halide containing silver iodide at 0.1 to 40 molar %, but only discloses a photothermographic material coated by an organic solvent dissolving a binder. An image forming layer coated by an organic solvent differs from one coated by an aqueous solvent using polymer latex binder in the state of components existing in the layer, for example, a dispersion state of a reducing agent, a photosensitive silver halide, and an organic silver salt. It is difficult for an image forming layer coated by an organic solvent to obtain an improvement in discrimination having higher sensitivity and lower Dmin and also an improvement at an unexpectedly large level in print-out property.

An imaging material disclosed by Siga ('889) is a post-activation material, which is non-photosensitive before using and made photosensitive by a post-activation process just before imaging. The imaging material disclosed by Siga does not have a photosensitive silver halide originally, but makes a silver iodide by a reaction in a coated layer by a post-activation process. Siga does not disclose or suggest the construction of the present invention and it is not obvious for the worker of ordinary skill in the art at the

time the invention was made to introduce the construction of present invention since there is no motivation in the prior art suggesting the effects of the present invention.

Ishizuka ('038) and Ohzeki ('570) disclose a reducing agent represented by formula(R) and latex binder, but do not disclose a silver iodide in present invention and a specified polymer latex as set forth in present claims 4 to 10.

A combination of a reducing agent represented by formula(R), latex binder and a silver iodide in present invention gives an image improved in discrimination having a higher sensitivity and lower Dmin, and also unexpectedly improved print-out property. Ishizuka and Ohzeki do not disclose or suggest the combination and effects obtained in present invention. Particularly notable are the extraordinary effects of the specific polymer latex set forth in claims 4 to 10 shown in Tables 4 and 6 of Example 4 and 5 in the present application. For example, samples 20 to 27 and 28 with monomers of formula (M) resulted in higher Dmax and improved dark stability and stability to a test with isotonic sodium chloride solution than a sample 32 with a butadiene monomer. Ishizuka and Ohzeki do not disclose or suggest such effects, and it is not obvious for the worker of ordinary skill in the art to combine these references since nothing in the prior art suggests their combination or that their combination would result in the effects of the present invention.

Claims 14 and 23 were rejected under 35 U.S.C. 103(a) by Ohzeki ('570), Uytterhoeven ('488), Siga ('889), and Toya ('126) as applied to earlier claims and further in view of Fukui('502) and EP 1096310 A2.

A compound represented by formula (II) in Fukui('502), such as compounds 2-1

to 2-39 in paragraph [0048]-[0066] at page 5, is a color-tone-adjusting agent having a function to provide an image with a tone close to a pure black tone, and different from the development accelerator of the present invention. Specific compounds are recited in claims 28 to 30 (supported by compounds No.A-7 to A-11 at page 133, and development accelerator-2 in example in present application). Fukui does not disclose nor suggest the use of the specified compounds as a development accelerator. It is not obvious for the worker of ordinary skill in the art at the time the invention was made to introduce the development accelerator of present invention since there is no motivation to combine the Fukui or EP references with the ones cited above and no expectation of the effects of the present invention.

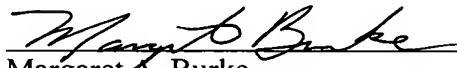
Claims 1 to 20 were rejected under obviousness-type double patenting to a combination of copending application 10/722,553 with Toya and Matsumoto.

Claims 1 to 12 were rejected under obviousness-type double patenting to a combination of copending application 10/724,706 with Toya and Matsumoto.

Terminal disclaimers to co-pending application Nos.10/722,553 and 10/724,706 accompany this response. Therefore it is requested that these rejections be withdrawn.

In view of the foregoing amendments and remarks, it is respectfully submitted that all of the claims currently pending in the application are in condition for allowance. Early and favorable action is respectfully requested.

Respectfully submitted,


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